

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



May 14, 2008

TO: INTERESTED PARTIES

SUBJECT: *Research, Development, and Demonstration Projects for Waste Heat Recovery from Industrial Processes in California, #500-07-502, Addendum #1*

Notice Is Hereby Given That The Above RFP Is Amended As Follows:

Attached are the most significant questions and answers pertaining to the above RFP. As stated in the RFP, the deadline to ask questions closed on May 5, 2008. All further questions regarding this RFP must be Administrative only and directed to the Contracts Officer.

Attached are the Sign-In Sheet and the PowerPoint Presentation from the May 5th, 2008 Pre-Bid Conference.

Proposals must be delivered no later than 5 p.m., June 6, 2008, to the Energy Commission's Contracts Office.

Except as herein amended, all other terms and conditions shall remain the same.

Sincerely,

Rachel L. Grant
Contracts Officer

Attachments: 1) Questions and Answers
2) Pre-Bid Conference Sign-In Sheets and WebEx Attendees
3) PowerPoint Presentation

Questions and Answers From May 5, 2008 Pre-Bid Conference

Question #1:

Are thermodynamic cycles/processes besides standard "constant pressure/rankine" cycles being considered for funding? Energy recovery & conversion from waste steams below 500F are in the 15-25% range using constant pressure systems. Constant volume systems in this temperature range can be 30-50%, but incur penalties because of the increased complexity of valving & higher pressures. Integrated into home heating systems, solar thermal could extend usefulness & efficiency well beyond current PV.

Answer #1:

Yes, a project such as this could be considered for funding.

Question #2:

Is this RFP exclusively focused on waste heat recovery or could it fund prime movers such as Stationary Natural Gas powered Internal Combustion Engines, which are addressing waste heat recovery aspects (CHP)?

Answer #2:

Yes, a project such as this could be considered for funding.

Question #3:

...is it a requirement to have an industrial partner as one of the co-bidders?

Answer #3:

No. It is necessary to obtain 700 points to pass the technical scoring criteria. Some projects intrinsically require a site as a part of the project and it would therefore benefit from industrial partner (and score accordingly per the criteria scoring). Other projects are more research oriented and do not need a site. Example: A project without an industrial partner could pass the 700 point threshold without an industrial partner and be eligible for funding. The downside for a project without an industrial partner is it would not be able to earn as many points as compared to a project that did have an industrial partner.

Question #4:

Can utility rebates count toward either match funding or project cost effectiveness (payback).

Answer #4:

No. It will not be counted as match funding or cost effectiveness (since utilities do not hand out rebates for unproven technology).

Question #5:

What is the relative weighting of the strategic objectives? For example: A waste heat recovery (energy) benefiting project versus a green house emissions benefiting project.

Answer #6:

One area is not more important than another. We will evaluate each project on its own merits. In the “impacts and benefits to California” scoring criteria, we will allocate the possible points among the sub-criteria (a) through (e) based on what kind of project it is. A project that has mostly “green” benefits can score well. A project that has mostly “economic” benefits can also score well but for different reasons.

Question #6:

How does the Energy Commission protect intellectual property?

Answer #7:

The Energy Commission will not make a claim on pre-existing intellectual property as long as the Energy Commission is not providing funding toward the development of intellectual property. This question has come up many times before. This is not a problem as long as it is clear that the proponent is funding the technical development, and it is clear that the Energy Commission is funding other aspects such as a demonstration, long term testing, or product specification reports.

CALIFORNIA ENERGY COMMISSION PRE-BID CONFERENCE ATTENDEES

Solicitation # 500-07-502

May 5, 2008

IS YOUR FIRM A CERTIFIED DVBE?

YES ☒ NO ☐

Darryl Appelgate

Benz Air Engineering Co. Inc

Project Manager

dappelgate@benzaireng.com

209-202-1902

Webex Attendees:

Pedro J. Mago

Sundar Krishnan, Argonne National Laboratory

G. Anand

Call-in User 1, Mississippi State University

Call-in User 4, Arthur Gibson, Designs Advance

Designsadvance@yahoo.com



Research, Development, and Demonstration Projects for Waste Heat Recovery from Industrial Processes in California

California Energy Commission

Request for Proposals

RFP 500-07-502

Pre-Bid Conference

May 5, 2008



Proposal Requirements

- Consists of Three Volumes
 - VOLUME 1 – Administrative
 - VOLUME 2 – Technical and Cost Information
 - VOLUME 3 – Confidential Information, if applicable



Volume 1, Administrative Section

Every Proposer must complete the following forms in Volume 1

Form	Attachment
Cover letter	None
Application and Project Information Form	2
Contractor Certification Clauses	3
Disabled Veteran Business Enterprise Program Requirements Form	4
Certified Small/Micro Business & non-Small Business Form, if applicable	5



Volume 1, Administrative Section Continued...

Form	Attachment
Target Area Agreement Preference Request Form, if applicable	6
Enterprise Zone Act Preference Request Form, if applicable	7
Local Agency Military Base Recovery Area Form, if applicable	8



Volume 2, Technical and Cost Section

- Every Proposer must complete the following forms in Volume 2

Form	Attachment
Table of Contents	None
Executive Summary	9
Project Description	10
Project Manager and Project Team	10
Project Funding and Match Funding	10
Royalty Payment Exemption	10



Volume 2, Technical and Cost Section Continued...

Form	Attachment
Scope of Work	12 Exhibit A
Schedule of Deliverables & Due Dates, and the Gantt Chart	13 Exhibit A-1
Detailed Budget	13 Exhibit B
List of Contacts, Key Personnel, and Key Subcontractors	13 Exhibit F
Customer References	14
Appendices (See Page 28 of 30)	None



Volume 3 Confidential Information (if applicable)

Form	Attachment
List of Confidential Information and Intellectual Property	16
Copy of Confidential Submittal	None



Small/Non-Small Business Preference

- **Small Business Preference**
 - Certified Small Businesses or micro-businesses can claim the five percent preference when submitting a proposal. See RFP, pages 17 and 29 for more information.
- **Non-Small Business Preference**
 - Bidder commits to small or micro business subcontractor participation of 25% of net bid price. See RFP, page 17 for more information.



Disabled Veteran Business Enterprise (DVBE) Requirements

TWO options for Proposers:

Option A, full DVBE participation

3% of total Agreement amount

Option B, Good Faith Effort

partial DVBE participation or no DVBE participation



DVBE (continued...)

Option A – Commitment

Proposer commits to meet or exceed the DVBE participation requirements by either of the following methods:

Method A1 – Proposer is a Certified DVBE

Method A2 – Subcontractor is a certified DVBE and will receive at least 3% of the Agreement amount



DVBE (continued...)

Option B, Good Faith Effort

(partial or no DVBE participation)

Perform, and document on Attachment 4, the following steps 1-5:

Step 1 – Contact the Energy Commission's Contracts Office for DVBE information (Stan Blois at 916-654-4392, or sblois@energy.state.ca.us)

Step 2 – Contact other State and Federal Agencies, and Local Organizations



DVBE (continued...)

Step 3 –Advertise at least 14 calendar days (see page 1 of the RFP for deadline dates) prior to proposal due date in both a trade paper and a DVBE focus paper. If the paper is dual purpose and fulfills both requirements, only one ad is required. When submitting a proposal:

- Proposer must provide the publication name, contact name and phone number, and date ad was placed
- Proposer must submit ad copies



DVBE (continued...)

Step 4 - Invitations to Participate

- Invite (solicit) DVBEs who provide relevant services to the Agreement
- Document completed contacts and submit copies of each invitation and copies of confirmation of fax transmittal or delivery
- Proposals are considered non-responsive if copies of invitations are not submitted with the proposal



DVBE (continued...)

Step 5 – Consider all DVBEs who respond to an invitation based on the Agreement needs, document DVBE firm(s) selected and document reasons for any firm(s) not selected.

A copy of an Agreement between the Contractor and the DVBE must be submitted prior to contract award. The Agreement may be in draft form but must show that the DVBE meets the Commercially Useful Function requirements as defined in the RFP.



Tentative Key Activities and Dates

ACTIVITY	Action Date
RFP Release	April 21, 2008
Pre-Bid Conference, Sacramento, CA	May 5, 2008
Deadline for Submittal of Questions	May 5, 2008
Distribute Questions/Answers and Addenda (if any) to RFP	May 16, 2008
Due Date for Notice of Intent to Bid	May 22, 2008
Publishing deadline for DVBE Advertising	May 22, 2008
Deadline to Submit Proposals, no later than 5 PM	June 6, 2008
Interviews with Bidders (if necessary)	June 23-27, 2008
Posting of Notice of Proposed Awards	July 7, 2008
Commission Business Meeting to Approve Agreements	October, 2008
Agreement Start Date	November, 2008
Latest Project Completion Date	December 2012
Latest Agreement Termination Date	March 2013



Questions and Answers

Question and Answer Session



Contact Information

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Research, Development, and Demonstration Projects for Waste Heat Recovery from Industrial Processes in California

Technical/Program Discussion

California Energy Commission

Request for Proposals

RFP 500-07-502

Pre-Bid Conference

May 5, 2008



Program Overview

- In August of 2004, the California Public Utilities Commission (CPUC) issued Decision (D.) 04-08-010 making funds available for public interest natural gas research and development (R&D) projects. Public Interest Natural Gas Research must conform to all of the following criteria:
 - Advances science or technology.
 - Research benefits accrue to California citizens.
 - The research is not adequately addressed by competitive or regulated entities.



Program Overview Cont.

- The CEC 'public interest energy research' (PIER) program includes the full range of research, development and demonstration activities.
- PIER funding efforts are focused in several RD&D program areas managed by PIER subject area 'teams'.
- The PIER-IAW team is funding this RFP, and focuses on the challenges and needs of the industrial, agriculture and water sectors. PIER-IAW typically funds technologies which are close to market ready.



Program Scope

- California has a substantial industrial base. The energy reliability of these industries is critical not only for California's economy but for the national economy as well. The major industries - such as food processing, electronics and e-commerce, petroleum refining and production - all depend on continued low cost and reliable energy. PIER IAW - funded projects will focus on RD&D activities that will provide these industries the ability to address energy efficiency and related pollution and green house gas emissions.



RFP Purpose

- The purpose of this Request for Proposals (RFP) is to select one or more contractors who will conduct research, development and demonstration (RD&D) on waste heat recovery.
 - Economically viable methods to recover large amounts of waste heat have been identified as an RD&D priority for California industries. Almost all major industries using steam and process heating systems generate low grade heat (i.e., heat streams below 500F) and mid grade heat (i.e. heat streams 500F – 1000F). Heat streams at temperatures above 1000F have largely been exploited with exceptions for processes that offer unique challenges such as corrosive environments.



RFP General Information

- Up to \$1,000,000 awarded for up to three projects.
- Term of the project is flexible. Typical terms for projects funded by the PIER-IAW team: 18 - 36 months.
- Technology is only part of the equation for a successful proposal. Adoption potential and market size are emphasized in the scoring process.



Questions and Answers

Question and Answer Session